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NOTE: There is no marked-up copy attached, because no claims or specification amendments have been made at this time. Only drawing changes are attached.

The Drawing Objections

The drawings stand objected to because examiner states that they fail to show ramlocks and grommets as described in the specification, because Figure 1 contains text, and because all component numbers are faded.

Examiner contends that Figures 3b-3d do not show the ramlocks and grommets or any means of how they are used to connect the panels. Applicant is somewhat confused and respectfully traverses this objection. Figure 3b clearly shows several ramlocks, as element number 336. Ramlocks 336 are shown clearly inserted through the material of the panel at ribs where two panel edges abut. Thus, ramlocks 336 are clearly shown, and are shown in place holding two panels together. Similarly, Figure 3c clearly shows grommets 356/358 in place, holding two panels together. As with ramlocks 336, grommets 356/358 are inserted through the material of the panel at ribs where two panel edges abut. See Page 8 of the specification for an explanation of Figures 3b and 3c. In addition, as noted on Page 8 of the specification, ramlocks and grommets are articles whose general structure and function are known in the art and thus great detail is not required in text or drawing to show their means of action.

Therefore, because ramlocks 336 and grommets 356/358 are clearly shown in Figures 3b and 3c respectively, and are clearly shown in action/position holding panels together in Figures 3b and 3c respectively, Applicant has not made any changes to these figures and respectfully requests that Examiner withdraw this objection. Applicant welcomes a call from Examiner to clarify any outstanding issues with respect to the drawings, or to have Examiner further explain what about the ramlocks and grommets he believes need clarification.

Figure 1 has been amended to remove the text.

All figures have been amended to darken component numbers.

Therefore, based on the amendments and arguments above, Applicant respectfully requests that all the drawing objections be withdrawn.

No new matter has been added.

The 35 U.S.C. § 112 2nd Paragraph Rejections

Claims 9-14 stand rejected under 35 U.S.C. § 112, 2nd paragraph as being indefinite for failing to point out and distinctly claim the subject matter which Applicant regards as the invention. Examiner states that the claims do not describe the process of joining ramlocks or grommets together in order to join two prefabricated panels together.

Applicant respectfully traverses these rejections and respectfully requests reexamination and reconsideration of the application.

Applicant is somewhat confused. To begin with, the ramlocks and grommets are not themselves joined. They are each used individually to join two adjacent panels. As stated at page 8, lines 14-24, Applicant explains

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how ramlocks and grommets would be used to connect the panels, to the extent necessary. Ramlocks and grommets themselves are known, (as Examiner even states in the 103 rejection of claims 9-14). Applicant, at page 8, lines 14-24 states that these devices can be constructed in any way commonly known in the art. Excessive detail is not necessary in either the specification text or the claims when a device and its general use and function are known in the art. For example, if one were claiming "connecting two elements by a screw device" or "connecting two elements by a nail device" one would not have to explain the process of how the screw or nail works because it is generally known how a screw or nail works. As Examiner states in the 103 rejection of claims 9-14, through-bolts (which Applicant also mentions in the description cited above) are of a similar design to "ramlocks" and are commonly used in the art of construction for securing construction components, such as wall panels, together. Thus excessive detail is not necessary in either the specification text or the claims. Claiming that panes are connected using ramlocks, grommets and/or ramlock tubes is sufficiently definite because these elements and their general use and function are known and understood.

In addition, according to Examiner's analysis in the 103 rejections, claims 9-14 can not be both indefinite and obvious with respect to use of ramlocks and / or grommets. The process claimed in specifically claims 9, 11, and 13, wherein it is claimed that two panels are aligned edge to edge at mid rib to form a joint, then connected by a ramlock device, an adjustable grommet device, and a ramlock tube device is certainly described sufficiently to particularly point out and distinctly claim the subject matter of the claims at issue because Examiner states that the process / method of use of devices such as ramlocks would be known to one of ordinary skill in the art. Applicant asserts that in this case claims 9-14 can not be both indefinite for failing to point out and distinctly claim the process of using ramlocks and / or grommets to join two panels AND obvious using Examiner's assertion that use of / process of using ramlocks and / or grommets to join construction components is known. If the process of using ramlocks and / or grommets to join construction components is argued to be known and obvious then how can the same (supposedly known) use / process of use be insufficiently claimed as to be indefinite? If use of ramlocks for joining construction components together is known, then claiming use of ramlocks as part of a process to join construction components can not be indefinite. There is no need to go into excessive detail in the claims about how a ramlock or grommet works since they are known entities. One of skill in the art would know how to perform the process of alignment and joining claimed in claims 9-14.

Therefore, Applicant asserts that because ramlocks and grommets, and their use and process of use, are known in the art (though not obvious in the context of their present use), claiming "connecting said two panels by use of a ramlock device", "connecting said two panels by use of an adjustable grommet device", and "connecting said two panels by use of a ramlock tube device" is not indefinite. One of ordinary skill in the art would understand these claims and how to connect the panels using ramlocks, grommets and / or ramlock tubes.

NOTE, however, that Applicant is NOT saying that the use of ramlocks and / or grommets in the present invention is obvious, as Examiner asserts in later rejections. Simply because an element and its general method of

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use and functioning is known, does not mean that its use in a particular device, method or invention would be known or obvious. For example, a new use of a known device or compound is potentially patentable. This is analogous to the situation at hand. Claiming connection of panels by ramlock, grommet and / or ramlock tube devices is definite in that one of ordinary skill in the art would understand how to make such a connection using these devices, BUT, such a use, in combination with the other steps / elements of the claims of the present invention is not obvious.

Therefore, Applicant respectfully requests that Examiner withdraw these rejections.

No new matter has been added.

The 35 U.S.C. § 102(b) Rejections

Claims 1-5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,600,929 to Morris. Examiner states that Morris discloses a prefabricated panel having a ribbed interior skin made of metal (Fig. 10 : 12) – rejection of claim 2, a flat exterior skin made of fiberglass (Fig. 10 : 16) – rejection of claim 3, and a foam core sized to fit between the two skins (Fig. 10 : 14) rejection of claim 4. Regarding claim 5, Examiner states that Morris discloses the panel section as terminating at midway of a rib (Fig. 9 : 14).

Applicant traverses these rejections and respectfully requests reexamination and reconsideration of the application.

All of the elements claimed in claims 1-5 are not disclosed or claimed by Morris. First of all, Morris is a roofing structure, not a wall structure. Morris uses an existing roof and puts materials on top of it to stabilize and fire-proof the roof. Everything in Morris is added to an existing roof, as part of the “roof assembly”. Even if Applicant’s invention were for roofing, Morris still does not disclose all of the elements of the present invention. Finally, the key to the invention of Morris is the “fire retardant mastic of the invention” as disclosed at column 4, line 41, immediately under “Description of the Preferred Embodiments” which is used to stick the components of the roof assembly together. Applicant requires no such mastic in her pre-fabricated wall panel.

With respect to claim 1: Morris does not disclose a ribbed interior skin. The invention of Morris is a plurality of materials to be put on top of an existing roof deck to stabilize and fire-proof the roof. What Examiner is equating to Applicant’s “ribbed interior skin” is an existing corrugated roof deck 12 in Morris. The existing corrugated roof deck is not part of Morris’ invention. Morris’ invention simply puts material over an old roof. An old roof is simply not the same element as Applicant’s “ribbed interior skin” that bears loads axially and that is prefabricated as a complete wall panel. And although Morris lists pre-assembly of some of its components, including the foam 14, the roofing board 16 and the outer membrane layer 18, it does not disclose any prefabrication of a ribbed interior skin. None of Morris’ pre-assembled re-roofing structures include a ribbed interior skin or even a metal roof deck. Morris never pre-assembles a metal roof as part of its pre-assembled components. Thus, the first element of Applicant’s claim 1 is not present in Morris whether the invention of Morris is installed on site or pre-

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assembled.

Applicant's "flat exterior skin" is also not present in Morris. Examiner states that Morris' outer layer is a fiberglass skin. It is not. Examiner is equating Morris' "roof membrane" which is a "modified bitumen membrane" 18 to Applicant's "flat exterior skin". As disclosed in Morris, column 6, lines 17-20, the modified bitumen membrane is entirely conventional. Applicant's "flat exterior skin" is not the bitumen membrane of Morris. As disclosed, at page 7, lines 23-25 of the present Application, the "flat exterior skin" is attached, in advance – i.e. prefabricated – as part of the wall structure. It is not strips of bitumen membrane and is not added as a separate step at the construction site. Applicant's "flat exterior skin" is not Morris' "modified bitumen membrane" and is thus not disclosed by Morris. In the alternative, if Examiner is equating Applicant's "flat exterior skin" to Morris' "roofing board" 16, that is also inaccurate. The roofing board 16 of Morris is not the exterior layer. The bitumen membrane 18 is placed over the roofing board 16 of Morris, which makes the roofing board 16 an interior layer. Therefore, Morris does not disclose Applicant's "flat exterior skin".

With respect to Applicant's core, the foam used by Morris is actually an *outer* layer that is laid onto/into the existing metal roof deck. There is no prefabricated *interior* foam core present in Morris.

With respect to claim 2: Morris does not disclose a metal ribbed skin. The invention of Morris, even the pre-assembled embodiments, do not include any metal ribbed skin. Morris uses an existing metal roof in combination with their re-roofing materials. Applicant's invention, by contrast, contains the ribbed interior skin, that is preferably made of metal. Morris never adds or assembles any metal skin. They merely use an existing metal roof. None of Morris' pre-assembled re-roofing structures include a ribbed interior skin or even a metal roof deck. Morris never pre-assembles a metal roof as part of its pre-assembled components. Thus, there is no prefabricated ribbed interior skin made of metal disclosed in Morris. In addition, claim 2 is dependent on a base claim that contains elements not disclosed in Morris, and which is thus allowable. Therefore, claim 2 is also allowable as dependent on an allowable base claim.

With respect to claim 3: Examiner seems to be combining two of Morris' elements to state that Morris discloses a fiberglass skin. Morris contains a roofing board 16, and an exterior bitumen skin. Although Morris does mention that their roofing board 16 may contain fiberglass, it is not the exterior layer. It is an interior layer. Thus, Morris does not disclose an exterior skin of fiberglass. In addition, claim 3 is dependent on a base claim that contains elements not disclosed in Morris, and which is thus allowable. Therefore, claim 3 is also allowable as dependent on an allowable base claim.

With respect to claim 4: again, Applicant's invention and claims contain elements simply not present in Morris, regardless of whether foam is used as an element of both. The foam used in Morris is an exterior layer laid onto an existing metal roof deck. Thus, there is no interior foam core used in Morris' individual or pre-assembled

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re-roofing invention. In addition, claim 4 is dependent on a base claim that contains elements not disclosed in Morris, and which is thus allowable. Therefore, claim 4 is also allowable as dependent on an allowable base claim.

Finally with respect to claim 5: Even though Figure 9 of Morris may appear to show the panel 24 terminating midway of a rib, there is no disclosure in the specification to support that the panels are designed that way. The only mention of the pre-assembled sections 24 of Morris states, in columns 5 and 6, lines 65-68 and 10-9 respectively is that the sections 24 are generally provided in 4"x4" or 4"x8" sizes. There is no teaching to back Examiner's assertion that the sections of Morris end mid-rib. Figure 9 simply shows partial sections of re-roofing panels. They just happen to be cut off mid-rib in some illustrations. However, there is no teaching that the pre-assembled embodiments of Morris must terminate in any particular configuration. Thus, the mid-rib termination of Applicant's panels is not disclosed by Morris. In addition, claim 5 is dependent on a base claim that contains elements not disclosed in Morris, and which is thus allowable. Therefore, claim 5 is also allowable as dependent on an allowable base claim.

Therefore, based on the arguments, and explanations shown above, that the present Claim 1 contains elements not disclosed or claimed by Morris, Applicant respectfully requests withdrawal of the rejection of Claim 1 and its dependent claims 2-5.

No new matter has been added.

The 35 U.S.C. § 103(a) Rejections

Claim 6 stands rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 5,600,929 to Morris in view of U.S. Patent No. 5,088,259 to Myers. Examiner states that while Morris does not disclose a slot formed in the foam core, Myers discloses a slot in a foam cored panel (Fig. 5), and that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Morris by adding slots in the foam core in order to allow for air circulation, decrease weight, and reduce costs.

Applicant traverses this rejection and respectfully requests reconsideration and reexamination of the Application.

With respect to Myers, Myers does not disclose any slots in a foam layer. While there are open spaces 54 between the angled walls of the corrugations, these openings are *not* in the foam layer. The openings of Myers are simply present as the valley of each corrugation. The foam layer used by Myers is layer 36 which sits *on top of* the ridges of the corrugations and is always solid. See element number 36 of Myers, and column 4, lines 15-19 in which foam insulation 36 is described. Thus, no slot or opening is ever cut, formed or present in the foam layer of Myers. Furthermore, Morris teaches completely filling all of the corrugations. There is no teaching in Morris to ever leave slots or openings in the foam or the corrugations.

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Examiner mentions cost and weight benefits – however, those aspects are taught against in Morris which teaches completely filling the valleys of the corrugations. Morris provides no teaching whatsoever to have any openings or slots for any reason - including cost or weight. In addition, Myers does not use the openings 54 for any purpose. They are just there as a function of the corrugated structure of the metal roof deck. There is no teaching at all in Myers to intentionally provide slots for running conduit or wiring, or for weight or cost benefits. In fact there would not be any need for slots for any type of conduit or wiring etc. to be run through a re-roofing overlay, which both Morris and Myers are. Thus, there is no teaching or suggestion, implicit or explicit, in either Morris or Myers that would provide any direction or indication that slots could or should be put in wall panel forms for running wiring, conduit, etc.. In addition, claim 6 is based on an allowable base claim and is thus also allowable. Therefore, Applicant respectfully requests withdrawal of this rejection.

Claims 7 and 8 stand rejected as being unpatentable over Morris in view of U.S. Patent No. 4,936,071 to Karrfalt. Examiner states that while Morris does not disclose joining the panels together at mid-rib edges and affixing a cap over the joint area, but that Karrfalt discloses joining ribbed panels together at mid-rib edges by fastening a panel over the joined area, and that it would have been obvious to modify Morris by adding a cap, in order to better secure the connections of panels to obtain a desired length while maintaining structural integrity.

Applicant traverses this rejection and respectfully requests reconsideration and reexamination of the Application.

To begin with, Examiner is correct that Morris does not disclose joining panels together at mid-rib. Morris has nothing to do with how the underlying existing metal roof deck is joined. Even the pre-assembled embodiments of Morris do not include the / a metal roof deck. Thus there is no teaching at all in Morris about how any types of roof panels may be joined or located with respect to each other or for what purpose. In fact, none of the Figures of Morris shows more than a portion of a single roofing panel.

However, Examiner is incorrect in stating that Karrfalt discloses joining ribbed panels together at mid-rib edges by fastening a panel over the joined area. Karrfalt does not disclose any method of joining at all. Figure 1, element 15 cited by Examiner is not any sort of panel, cap, or any means of physically joining panels. Element 15 is simply a tape laminate formed of butyl rubber and unvulcanized EPDM which is applied OVER the series of fasteners and over the seams formed by adjacent overlapping panels (which are already physically attached and joined with screws or other fasteners) to provide a weatherproof seal therefor. See Karrfalt Abstract and particularly column 3, lines 50-64 wherein typical metal roofing used with the Karrfalt invention is described.

Also, note that adjacent panels, as can be seen in particularly well in Karrfalt Figures 4 and 5, OVERLAP. Both existing roofing systems used with Karrfalt – those shown in Figures 1 and 2, and those shown in Figures 4 and 5 have overlapping panels that are already attached to each other by screws or other fasteners. The only

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mention of fastening together of panels is found specifically at column 3, lines 59-65 wherein the overlapping attachment is described, but is not part of the invention and is not performed by the tape laminate.

Thus, Karrfalt does not disclose or teach roofing panels that do not overlap. All of the roofing panels sealed by Karrfalt are overlapping. The ribbed interior skin of the present invention specifically does not overlap. Panels are adjacent each other and meet, (but do not overlap), at mid-rib. Thus, there is no teaching or suggestion whatsoever in Karrfalt to align wall panel materials adjacent each other, without overlapping.

Furthermore, Karrfalt teaches only a method and invention for a tape laminate for weatherproofing seams of overlapping metal roofing decks. The tape invention of Karrfalt is not a cap of any sort and could not possibly be used to actually join panels as Examiner suggests. As stated at column 4, lines 41 and 42, the tape of Karrfalt has an elongation factor of approximately 600%, so that it can stretch with the expansion and contraction of the metal roof. If one attempted to use such a tape to actually join two merely adjacent but non-overlapping panel elements (or even two overlapping panels), such a joint would simply not hold at all, much less maintain structural integrity as Examiner suggests.

Thus, in fact, Karrfalt does not disclose any method or means for physically joining any panel elements, and is not a means for joining. It is only a means for sealing existing seams against the weather. Therefore, modifying Morris (which does not contain panel elements adjacent at mid-rib), with the tape of Karrfalt does not and can not result in Applicant's invention. Furthermore, there is no teaching whatsoever in Morris or Karrfalt to have panel elements be adjacent but not overlapping.

In addition, one would not even seek or use such a tape as Karrfalt discloses on anything like the ribbed interior skin of the present invention because the ribbed skin of the present invention is an INTERIOR element. It does not need any sort of weatherproofing tape. Thus, while a weatherproofing roofing tape such as Karrfalt discloses could possibly be used to modify the roof of Morris, such modification would not and could not result in anything like Applicant's wall panel invention. In fact, as noted, Karrfalt teaches away from the present invention. It is not a cap or any physical means that could be used to join panels and thus could not in any way maintain structural integrity. It is used on the outer surface of roofs and would not be used on an interior surface of a wall panel such as the present invention provides. Therefore, Applicant respectfully requests that Examiner withdraw these rejections.

Claims 9-14 stand rejected for reasons cited in the rejection of claim 1. Examiner states that Morris does not disclose ramlock securing devices and grommets to connect panels, but that it would have been obvious to modify Morris by using through-bolts passing through grommets, as through-bolts are of a similar design to the "ramlocks" of the present invention, and may be used to better secure sections together, as through-bolts are commonly used in the art of construction for securing construction components such as wall panels together.

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Applicant traverses these rejections and respectfully requests reconsideration and reexamination of the application.

With respect to Examiner's rejection based on reasons cited in rejection of claim 1, Applicant has explained above that Morris does not disclose all of the elements of Applicant's claim 1. Morris, even in the pre-assembled embodiments does not disclose a ribbed interior skin, an interior foam core, or an outer fiberglass-containing skin. What Examiner has equated to the ribbed interior skin of the present invention is an existing corrugated metal roof which is not ever pre-assembled as part of Morris' re-roofing package. Applicant's "flat exterior skin" is also not present in Morris. Examiner states that Morris' outer layer is a fiberglass skin. It is not. Examiner is equating Morris' "roof membrane" which is a "modified bitumen membrane" 18 to Applicant's "flat exterior skin". As disclosed in Morris, column 6, lines 17-20, the modified bitumen membrane is entirely conventional. Applicant's "flat exterior skin" is not the bitumen membrane of Morris. Finally, Applicant's foam core is not present in Morris. The foam used in Morris is actually an outer layer that is inserted into/onto the existing metal roof deck. Thus, all of the elements in Applicant's claim 1 are not disclosed by Morris. Examiner is mis-equating elements in Morris to elements of the present invention..

Examiner then states that Morris does not use ramlock securing devices and grommets to connect panels. That is correct. Morris discloses nothing whatsoever about how panels are connected because Morris does not assemble the underlying metal roofing panels. The metal roofing panels used with Morris are pre-existing and are already in place as an existing metal roof. If one modified Morris by using through-bolts, it is not clear what would result. It is unclear what part of Morris Examiner is referring to when saying Morris could be modified by using through-bolts. Through-bolts would be unnecessary in the making of the pre-assembled components of Morris because the foam layer, the roof board and the outer bitumen membrane are glued together by the fire-proof adhesive of Morris. There is no need, and thus no teaching whatsoever in Morris, to use through-bolts of any sort to connect its components. They are simply glued together and then glued to the existing metal roof, again using the fire-proof adhesive of Morris. Therefore there is no need whatsoever in Morris for any sort of bolting, ramlock, grommet or any other mechanical means of joining materials. Thus, one would not be lead by Morris to seek or use any sort of through-bolt, ramlock or grommet whether they are known in the art or not. And even if through-bolts were somehow used in some portion of Morris, Applicant's invention would not result. Morris discloses and teaches only re-roofing materials. Applicant's invention is a prefabricated wall. Therefore because there is no need, no reason, and no teaching for Morris to use any bolting devices, it would not have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Morris using through-bolts, ramlocks, or grommets. One would not be lead by Morris to even consider such devices, and Applicant's invention would not and could not result even if some sort of through-bolt were used on Morris' re-roofing assembly.

Therefore, Applicant respectfully requests that these rejections be withdrawn.

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Conclusion

Based on the amendments, arguments and explanation presented above Applicant respectfully requests that Examiner withdraw the objections and rejections. Applicant has amended the drawings to comply with Examiner's requirements. Applicant has explained how the general use of ramlock and grommet devices would be known in the art and does not require detailed explanation to be definite. Applicant has also further explained the invention, with no claim amendments at this time, because perhaps Examiner did not understand fully the invention, since the references cited were all for re-roofing systems. None of the cited references disclose complete prefabricated systems containing all elements even for a roof (all are re-roofing systems for use over existing roof deck as opposed to a complete roof for example) much less a wall, nor does any cited reference disclose or teach joining abutting, but non-overlapping, panel components as does the present invention. All the existing roof decks of the cited references have existing panel components that overlap and are not connected or joined by any elements of Morris, Myers or Karrfalt. The roofing systems cited simply do not contain all of the elements of the present invention, and could not be combined in any way to result in the strong, load-bearing prefabricated wall panels of the present invention.

Therefore, Applicant submits that the Application is now in condition for allowance. Applicant requests allowance of the claims, and early notice of such allowance is respectfully requested. The fees associated with this amendment, if any are due, are included herewith.

Applicant also welcomes discussion with Examiner to work toward allowance of the Application if Examiner has any further questions. Please contact Applicant's attorneys, Kristin Kohler, at 231-275-3799, kohlerk@chartermi.net, or George W. Dishong at 603-532-7206 if Examiner would like to discuss allowance of this Application.

Respectfully submitted,



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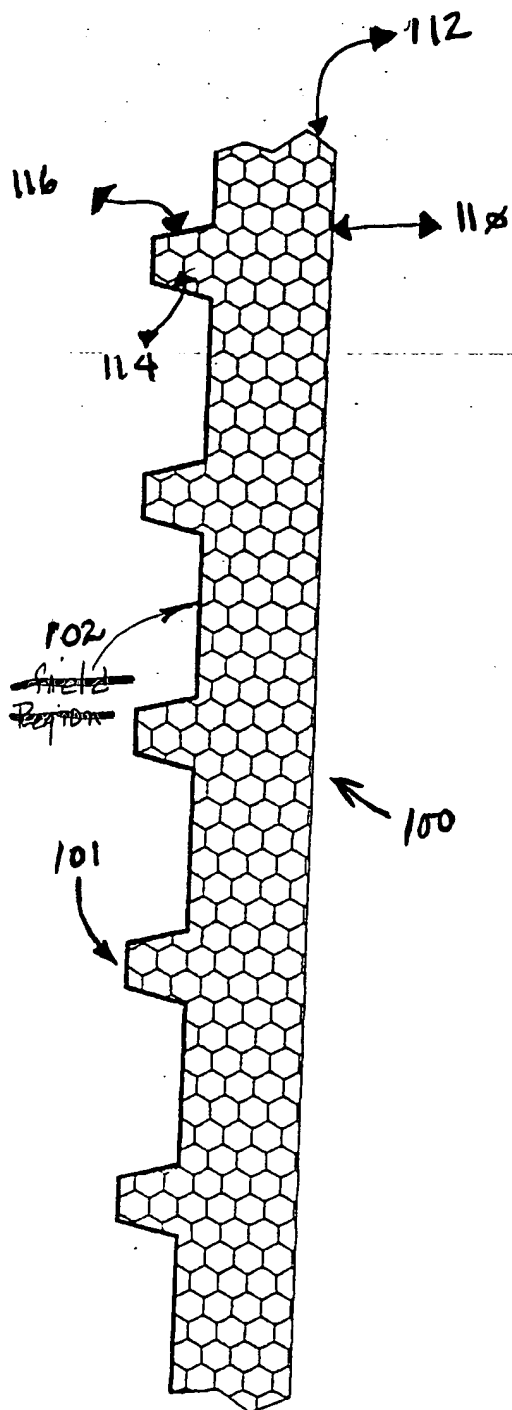


Fig. 1

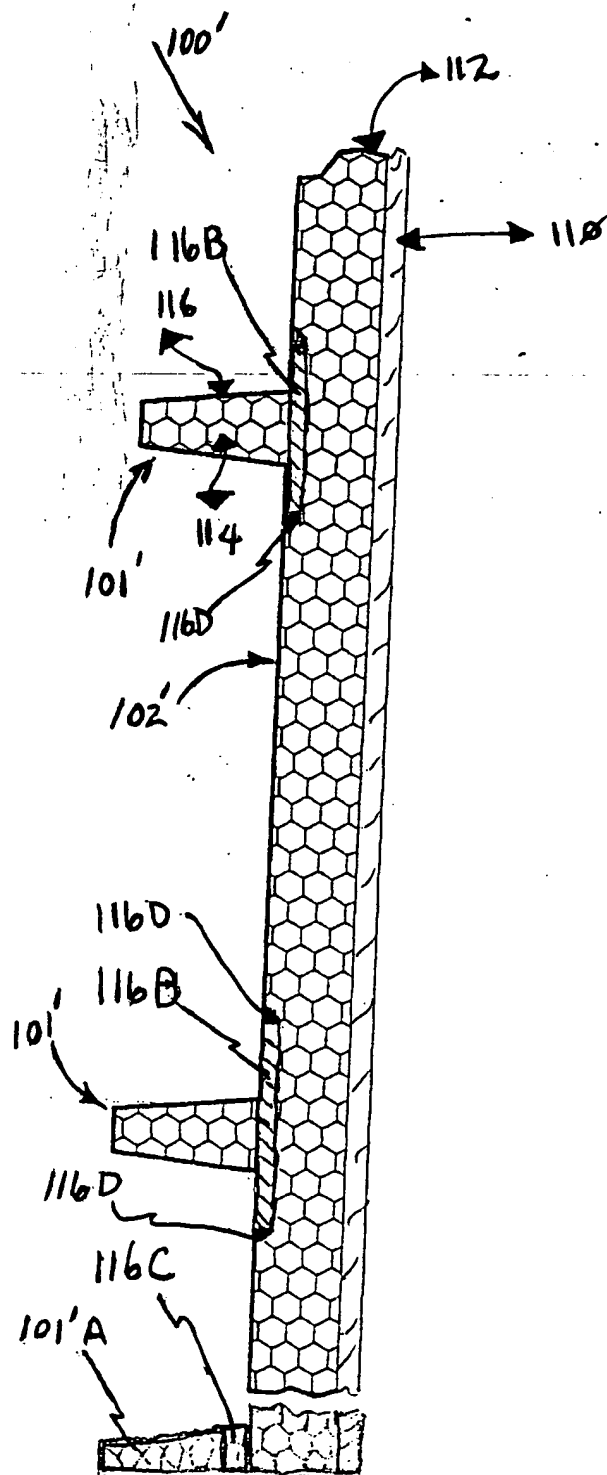
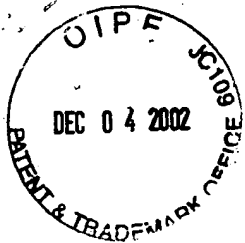


Fig. 1A



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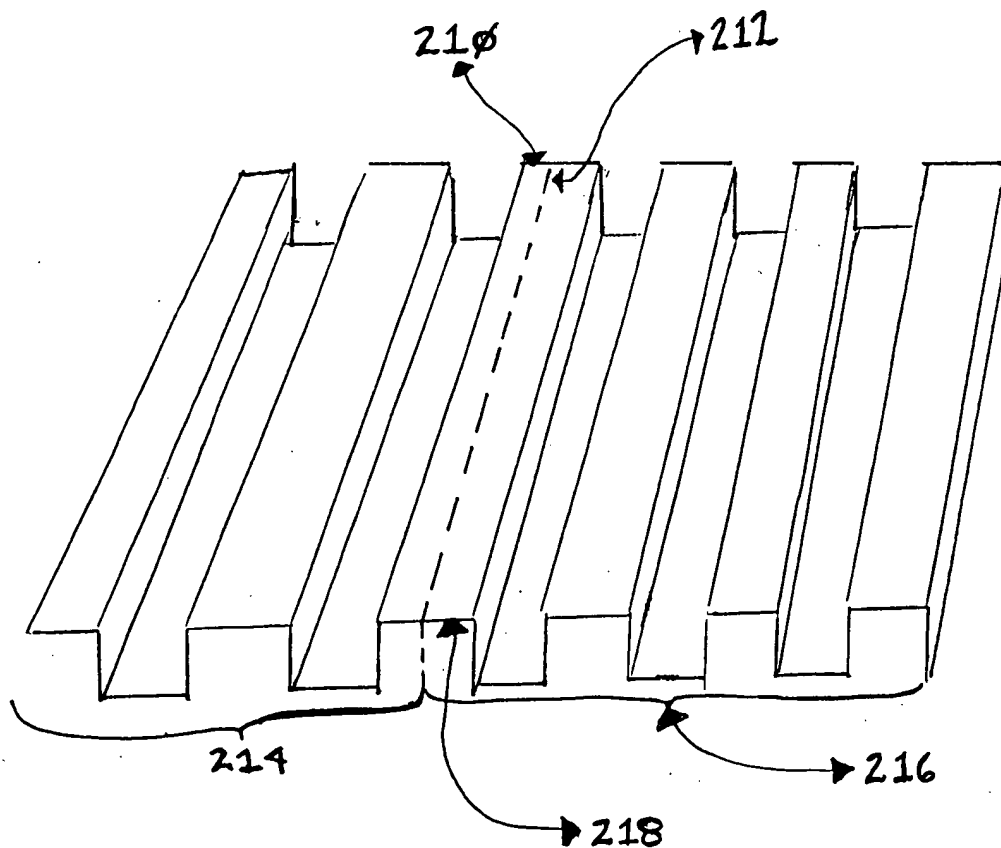


FIG. 2

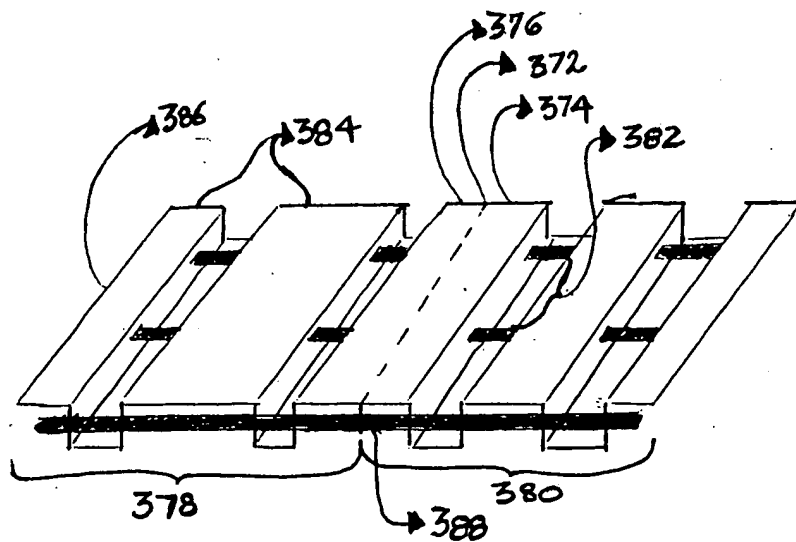
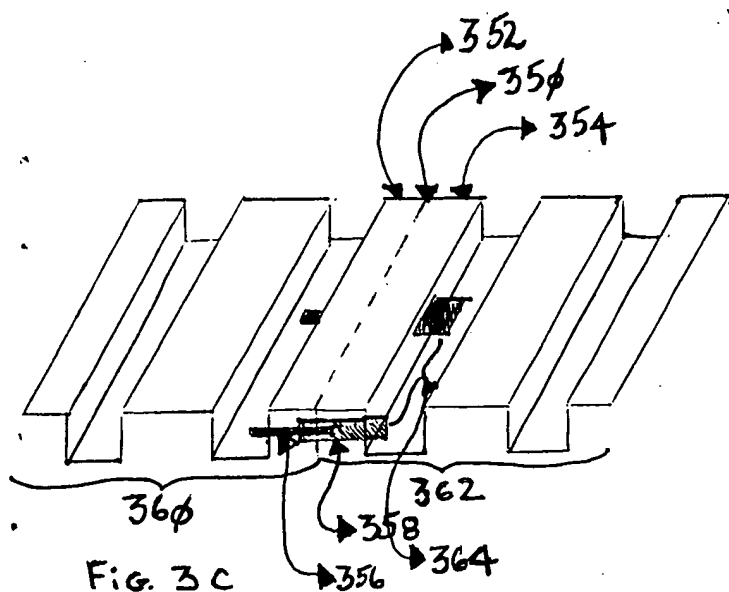
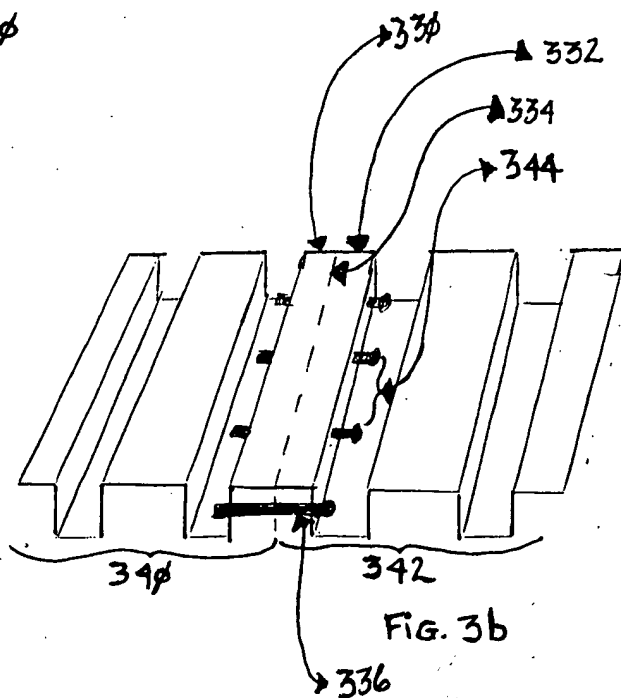
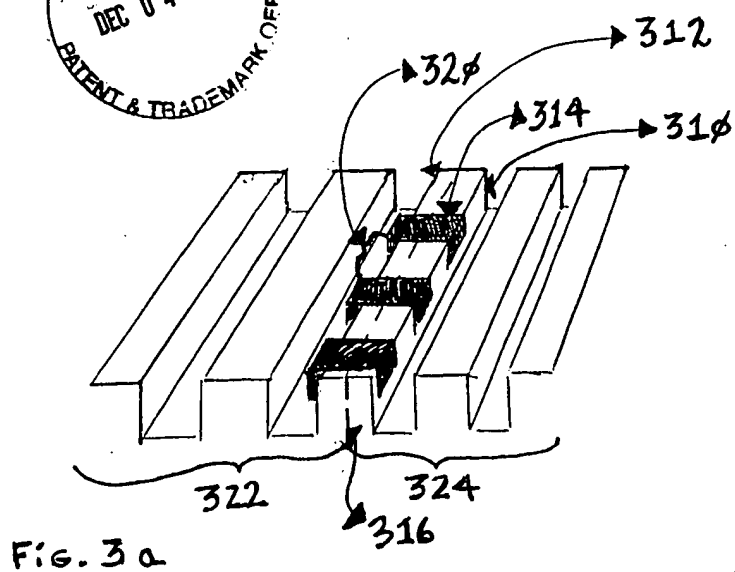


Fig. 3

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Pkt. No. WRB124-BIGID

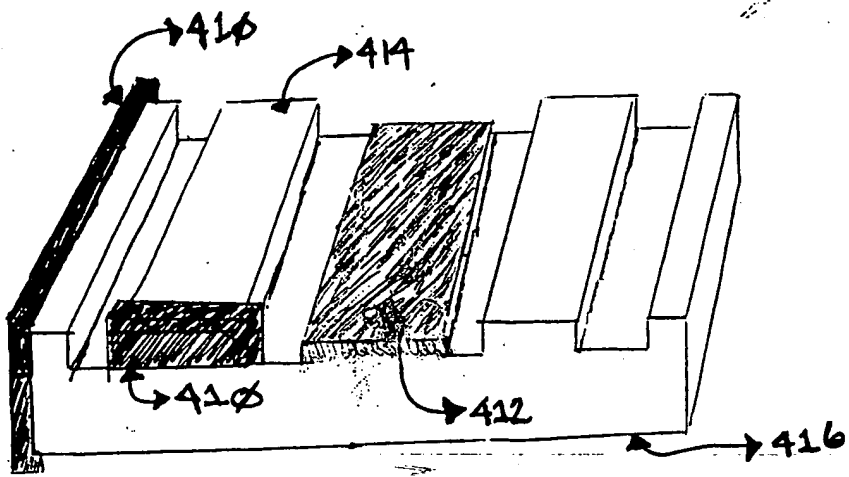


Fig. 4

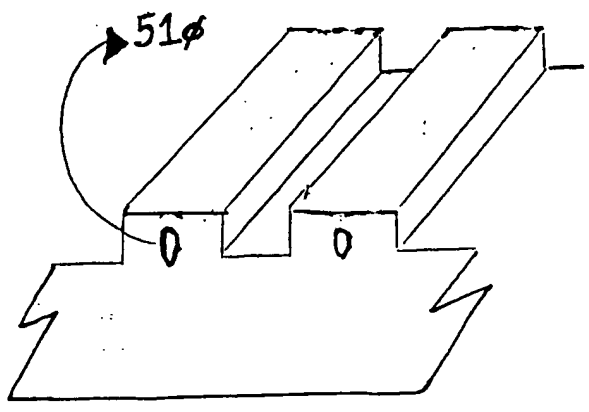


Fig. 5



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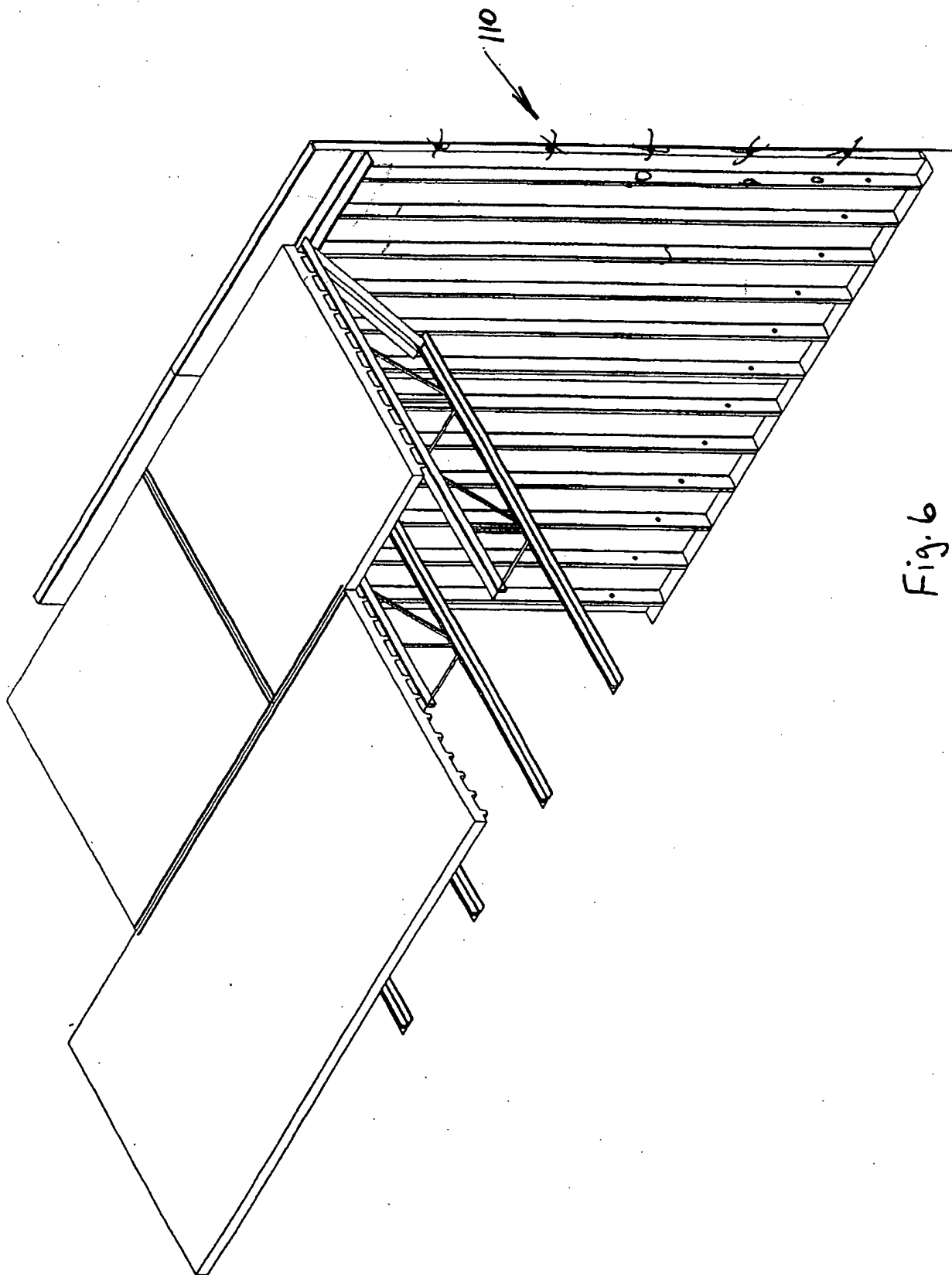


Fig. 6